To: OBrien, Wendy[OBrien.Wendy@epa.gov]

From: Graham, Richard

Sent: Mon 8/10/2015 12:56:22 PM

Subject: FW: Mine Water Treatment - Flocculent Information

FYI

See link bottom of page from HQ on poly...

From: Way, Steven

Sent: Sunday, August 09, 2015 4:10 PM

To: Graham, Richard

Cc: McKean, Deborah; Brobst, Bob

Subject: FW: Mine Water Treatment - Flocculent Information

Richard.

Here's the initial reference from your research that you provided in 2013 and indicated that the flocculant is acceptable to use in surface water. I believe that you spoke with Bob Benson also. As we discussed you recommendation was to use it as there is no evidence that it poses any aquatic or human health concern – especially given where we are using it and how little is required.

This was being used at the Penn Mine project as described below. During 2013 we used a "food" grade flocculent (chitin based) that would not plug the media filters that we used -i.e., Rain for Rent equipment. Following the report from the Penn Mine operation, I requested a toxicological recommendation on using Brenfloc or more generally the polyacrylamide based flocculent

The Brenfloc performed well for the operation at Penn Mine and we did some trial runs in 2014 at the Red and Bonita. Very small amounts used and provided high efficiency in settling with buffered mine water.

Flocculent Information

Steve,

We used two different flocculents at the Penn. The first flocculent that we used was called Brennfloc AP 2631, and is manufactured by Brentag (480-961-4189). It is a special order requiring 2 to 3 weeks lead time. We ended up needing additional flocculent, but because of the required lead time couldn't get additional Brennfloc, so we went with Hyper Drill AF 247 manufactured by Bri-Chem (303-722-1681). Both flocculents are polyacrylamides, and are considered anionic flocculents. Both varieties appeared to work pretty well. Let me know if you need any more info.

Thank you for the follow up and assistance.

Steve

Steven Way

Federal On-Scene Coordinator

Emergency Response Unit

US EPA - Region 8

1595 Wynkoop Street

Denver, CO 80202

Office: 303-312-6723

From: Graham, Richard

Sent: Tuesday, August 27, 2013 3:37 PM

To: Way, Steven

Subject: RE: Drinking Water Info on EPA WebPage

 $\underline{http://water.epa.gov/drink/contaminants/basicinformation/acrylamide.cfm}$